## **Review of some Basic Algebra**

Expand and simplify each of the following:

a) 
$$2(3x-1)-2x(3x+1)$$

b) 
$$(x + 2)(2x + 1)$$

c) 
$$3(x-2)(x+5)$$

d) 
$$(x^2 - 3x + 4) - (5x^2 - x + 2)$$

e) 
$$(x + 3)^2$$

f) 
$$(x + 1)(2x - 1) - (4x - 1)(x + 3)$$

Suppose that x = -1, y = 2 and z = -3. Then **evaluate** each of the following:

a) 
$$x^2 - 2y + z$$

b) 
$$3z^2 + x^2$$

## Solve each of the following.

a) 
$$2x - 5 = 13$$

b) 
$$3n - 4 = 6n + 20$$

c) 
$$2(3r-4) = 3-2(r+6)$$

d) 
$$x^2 - 9 = 0$$

The above questions all deal with \_\_\_\_\_\_.

## **Algebra Review Exercises**

1. Solve each of the following. (we will take these up in class tomorrow)

a) 
$$2n + 18 = 4n - 30$$

b) 
$$3(2x-4)-3(x+2)=5x$$

c) 
$$4(z-3) = 2(z+1) - 5z$$
 d)  $2s^2 - 72 = 0$ 

d) 
$$2s^2 - 72 = 0$$

- 2. Text page 62 #6acdef, 8 (check answers in back of text)
- 3. Page 122 #3abeef, 4 (check answers in back of text)

ANSWERS to #1: a) n=24 b) x=9/4 c) z=2 d) s=6 or -6